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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,609	03/08/2001	Alain Chiodini	NBAN0004	6135
22862	7590	05/24/2005	EXAMINER	
GLENN PATENT GROUP 3475 EDISON WAY, SUITE L MENLO PARK, CA 94025			BAYARD, EMMANUEL	
			ART UNIT	PAPER NUMBER
			2631	
DATE MAILED: 05/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,609

Applicant(s)

CHIODINI ET AL.

Examiner

Emmanuel Bayard

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is in response to amendment filed on 12/15/04 in which claims 1-7 are pending. The applicant's amendments have been fully considered but they are moot based on the new ground of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-xeerd are rejected under 35 U.S.C. 103(a) as being unpatentable over Belotserkovsky et al U.S. Patent No 6,628,735 B1 in view of Bufford et al U.S. patent no 5,945,948.

As per claim 1, Belotserkovsky et al teaches a method for frequency-offset error determination, comprising the steps of: receiving (see figs.3, 6 elements 120 and col.3, lines 35-45 and col.4, lines 65-67) a string composed of a same basic constituent, where a basic constituent is generated from a sequence (see fig.4), defined in the frequency domain, containing QPSK (see col.2, lines 4-4 and col.5, lines 33-67)-Like modulated elements (see col.5, lines 40-45 and col.6, lines 3-4); sampling said string to collect a plurality of measurements each including two of said basic constituents (see fig.3, 6 elements 92-93, 122 and col.5, lines 27-36 and col.7, lines 525); accounting for all measured differences amongst said plurality of samples as being solely attributable to a common frequency-offset error (see abstract and col.2, lines 30-35 and col.5, lines

Art Unit: 2631

11-13 and col.7, lines 65-col.8, lines 15); and correcting for said common frequency-offset error in later digital signal processing (see abstract and col.1, lines 58-59 and col.6, lines 30-67 and col.7, lines 12-40).

However, Belotserkovsky et al does not teach composed of a same basic constituent, where a basic constituent is generated from a sequence repeated ten times.

Bufford et al teach a frame composed of a same basic constituent, where a basic constituent is generated from a sequence repeated ten times (see col.7, lines 39-40).

It would have been obvious to one of ordinary skill in the art to implement the teaching of Bufford into Belotserkovsky as to accurately determine the position of each constituent and minimize the errors position ad taught by Bufford (see col.7, lines 40-45).

As per claim 2, Belotserkovsky would teach wherein the step of sampling includes skipping a first few of said repeating QPSK symbols before a first measurement is taken as to accurately determine the position of each constituent and minimize the errors position ad taught by Bufford (see col.7, lines 40-45).

As per claim 6, Belotserkovsky would teach comprising the steps of: computing f (p) for sixty-four equally spaced values of g ranging from 0 to 208.33*Hz once a maximum eigenvector is available and identifying a bulky peak which provides the

frequency offset estimate as to accurately determine the position of each constituent and minimize the errors position ad taught by Bufford (see col.7, lines 40-45).

Allowable Subject Matter

Claims 3-5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

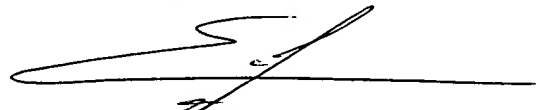
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard
Primary Examiner
Art Unit 2631

5/19/05


EMMANUEL BAYARD
PRIMARY EXAMINER